

**City of Sunnyvale**  
**Ten Year Project Costs**  
**by Project Category and Type**

Project Number	Project Name	Prior Years Actual	Revised Budget 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Plan 2015-16	Ten Year Plan Total	Project Grand Total
<b>Category: Infrastructure</b> <b>Type: Water</b>															
806302	Water Pipes, Manholes, and Laterals Replacement	44,686	20,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	283,681
806452	Water Pump, Motor and Engine Replacement	29,284	28,500	0	29,070	29,651	30,244	30,849	31,466	32,096	32,738	33,392	34,060	283,566	341,350
815202	Water/Sewer Supervisory Control System	30,051	1,900,787	0	0	0	0	0	0	0	0	0	0	0	1,930,838
824310	Refurbishment of Water tanks @ Wright Avenue	19,476	1,895,523	100,000	0	928,532	947,102	162,365	524,438	534,927	0	0	0	3,197,364	5,112,363
824800	Roof Replacement of Water Plants	0	15,000	0	0	0	0	0	0	0	100,843	0	0	100,843	115,843
825220	Central Water Plant Building Reconstruction	0	0	0	153,000	554,880	565,977	577,297	0	0	0	0	0	1,851,154	1,851,154
825230	Cleaning of Water Tanks	0	0	0	0	0	0	28,143	0	0	0	7,030	7,171	42,344	42,344
825240	Equipment Replacement at Five (5) Hetch-Hetchy Connections	0	111,000	0	291,720	287,150	0	0	0	0	0	0	0	578,870	689,870
825250	Mary/Carson Water Plant Mechanical Reconstructions	0	0	0	0	0	0	156,953	496,836	394,157	0	0	0	1,047,946	1,047,946
825260	Moat Renovation of Mary/Carson and Wolfe/Evelyn Water Plants	0	0	0	0	0	0	0	0	0	0	58,583	149,387	207,970	207,970
825280	Earthquake Mitigation of Water Tanks	0	150,000	0	0	104,040	451,013	460,034	469,234	478,619	0	0	0	1,962,940	2,112,940

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

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**Ten Year Project Costs**  
**by Project Category and Type**

Project Number	Project Name	Prior Years Actual	Revised Budget 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Plan 2015-16	Ten Year Plan Total	Project Grand Total
825300	Pressure Reducing Valve Replacement & Relocation for SCADA	0	60,000	0	61,200	62,424	63,672	121,232	123,657	126,130	128,653	131,226	133,850	952,044	1,012,044
825310	Shrouds at Well Sites	0	50,000	0	0	0	0	0	0	0	0	0	0	0	50,000
825390	Wolfe/Evelyn Plant Mechanical Reconstruction	0	0	0	0	150,858	451,013	230,017	234,617	0	0	0	0	1,066,505	1,066,505
825410	Hamilton Plant Emergency Generator & Mechanical Reconst	0	190,000	0	591,600	0	0	0	0	0	0	0	0	591,600	781,600
825420	Water Pressure Zone Three Expansion	0	106,000	0	0	0	0	0	0	0	0	0	0	0	106,000
825430	Raynor Well Connection	0	0	0	0	0	0	0	0	0	80,408	421,797	0	502,205	502,205
825440	Recycled Water Booster Pump @ Golf Course	0	175,000	0	0	0	0	0	0	0	0	0	0	0	175,000
825450	City-Wide Water Line Replacement	0	250,000	0	468,480	583,664	595,337	607,244	619,389	631,777	644,412	657,300	677,020	5,484,623	5,734,623
825460	Interior Coating of Water Tanks	0	0	0	0	296,514	302,444	0	0	371,634	379,066	386,648	394,381	2,130,687	2,130,687
825470	Well Study	0	0	0	0	0	0	0	0	0	0	46,866	0	46,866	46,866
825480	Inspection and Renovation of Well Systems	0	40,000	0	163,200	0	0	0	0	0	0	0	0	163,200	203,200
825490	Exterior Painting of Water Tanks	0	25,000	0	0	260,100	21,224	0	0	0	0	234,332	0	515,656	540,656
825500	Wright Ave Water Plant Mechanical Reconstruction	0	50,000	0	0	0	0	108,243	331,224	546,189	0	0	0	985,656	1,035,656

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

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Project Number	Project Name	Prior Years Actual	Revised Budget 2005-06	Plan 2006-07	Plan 2007-08	Plan 2008-09	Plan 2009-10	Plan 2010-11	Plan 2011-12	Plan 2012-13	Plan 2013-14	Plan 2014-15	Plan 2015-16	Ten Year Plan Total	Project Grand Total
Total		123,497	5,066,810	120,000	1,778,670	3,278,621	3,449,250	2,504,026	2,852,943	3,138,052	1,389,094	2,000,607	1,419,771	21,931,034	27,121,341

Note: Projects with \$0 Grand Total have budgets in the second ten years of the Twenty Year Plan.

## Project Information Sheet

### Project: 806302 Water Pipes, Manholes, and Laterals Replacement

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	1999-00	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project is intended to provide funding for miscellaneous small water projects that may arise unexpectedly. Generally, funding is used for emergency repairs occurring outside normal operations. Needs almost exceeded funding in 806301 last year. Aging water pipes are anticipated to have more frequent breakage. Budget should be maintained at least at current level for the next 5-10 years.

### Service Level

No service level effect

### Issues

See project 806301 for prior year expenditure history.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	44,686	20,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	283,681
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	
<b>Total</b>	44,686	20,000	20,000	20,400	20,808	21,224	21,649	22,082	22,523	22,974	23,433	23,902	218,995	283,681
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 806452 Water Pump, Motor and Engine Replacement

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	1998-99	Phase:	Ongoing	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project provides for the purchase and installation of pumps and motors, as needed, to replace old or obsolete equipment. Generally, funding is used for emergency repairs occurring outside normal operations. Due to the aging of the system, it is expected that funds will continue to be needed and that the need will be expanding.

### Service Level

This project ensures provision of continuous water supply and pressure to the potable water and fire systems.

### Issues

See project 806450 and 806451 for prior expenditure history.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	29,284	28,500	0	29,070	29,651	30,244	30,849	31,466	32,096	32,738	33,392	34,060	283,566	341,350
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	29,070	29,651	30,244	30,849	31,466	32,096	32,738	33,392	34,060	283,566	
<b>Total</b>	29,284	28,500	0	29,070	29,651	30,244	30,849	31,466	32,096	32,738	33,392	34,060	283,566	341,350
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 815202 Water/Sewer Supervisory Control System

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	1999-00	Phase:	Design	Project Manager:	Hira Raina
Planned Completion Year:	2004-05	% Complete:	25	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project involves replacing the existing Supervisory Control and Data Acquisition (SCADA) system hardware and software. The existing SCADA system is old and obsolete. This system needs to be replaced by a computer system which is centrally controlled. The budget is for the replacement of remote terminal units, telephone lines, and the data concentrator. The new system will provide additional channels which are needed to measure pressures, water hammer and peak demands.

The design is 100% complete. A contract has been awarded, and construction has started. Add alternates included in the original bid were not awarded and will be re-bid at later date. A recent Vulnerability Assessment recognized the need for immediate remote-control of valves in the event of an attack on the system.

Staff estimate that SCADA's life expectancy is around 15 years. After that time, the system will need to be upgraded. Any repairs that are needed in the meantime can be covered by the operating budget.

### Service Level

No service level effect

### Issues

See project 815201 for prior year expenditure history. The City has applied for Proposition 50 Funding for this project.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	30,051	1,900,787	0	0	0	0	0	0	0	0	0	0	0	1,930,838
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	30,051	1,900,787	0	0	0	0	0	0	0	0	0	0	0	1,930,838
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824310 Refurbishment of Water tanks @ Wright Avenue

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2003-04	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2009-10	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3 & 3.1A.3g	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The City follows a routine tank maintenance schedule in order to assure water tanks are properly maintained. Staff performs a ten-year maintenance review to determine the condition of the tanks and to make recommendations on coating repair, re-coating, cathodic protection and/or structural modifications. The last ten year assessment of water tanks concluded that all tanks are in good condition with the exception of the Wright Avenue tanks.

This project is to refurbish two Wright Ave. tanks, inside and out, in accordance with a complete structural and coating evaluation done in 2004. Both tanks require eventual removal of interior coatings by sand blasting and recoating with current standard materials. This project allows for an initial project to repair some structural damage and coatings for Tank #2. A second project to paint Tank #1 is budgeted in FY 2009/2010. Also included in the project is the replacement of the antiquated radial altitude valves that control tank level with a more conventional pressure valve assembly.

Refurbishing the tanks is much more cost-efficient than replacing them, since the cost of replacing one tank is in the millions of dollars. Also, replacing one or more of the tanks would burden the water distribution system for a longer period of time, since the water storage would not be available for drinking or fire protection. Proper coating with the normal schedule of periodic tank maintenance should keep the tanks in useable condition for up to 40 years.

### Service Level

This will improve service levels by ensuring water quality and the integrity of the water storage and conveyance system.

### Issues

None

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	19,476	1,895,523	100,000	0	928,532	947,102	162,365	524,438	534,927	0	0	0	3,197,364	5,112,363
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	100,000	0	928,532	947,102	162,365	524,438	534,927	0	0	0	3,197,364	
<b>Total</b>	19,476	1,895,523	100,000	0	928,532	947,102	162,365	524,438	534,927	0	0	0	3,197,364	5,112,363
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 824800 Roof Replacement of Water Plants

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2004-05	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1C	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project provides funding in 2004/05 to repair the roof support structure at the Mary/Carson water plant. In 2013/14, the funds will be used to replace the roofs of all five water plants (Mary/Carson, Wolfe/Evelyn, Central, Wright, and Hamilton). The tar and gravel roofs, which by then will have reached the end of their useful life, will be replaced with a stronger and longer lasting roofing product. Gutters will also be installed. The project will preserve conditions at all water plants.

The new roofs should not need any maintenance for at least 10-15 years, and replacement should not be necessary for 20-25 years.

### Service Level

No effect.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	15,000	0	0	0	0	0	0	0	100,843	0	0	100,843	115,843
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	0	0	0	100,843	0	0	100,843	
<b>Total</b>	0	15,000	0	0	0	0	0	0	0	100,843	0	0	100,843	115,843
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Project Information Sheet

### Project: 825220 Central Water Plant Building Reconstruction

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2007-08	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The Water Pollution Control Plant is a critical element of the City's water supply system. Existing buildings have deteriorated, and equipment is worn and needs replacement.

In FY 06/07, this project will provide funding to inspect and evaluate the site for termites and wood rot and to evaluate the existing equipment for replacement needs and construction design. In FY 07/08, the project will provide funding to install a new propane generator, magnetic flow meter, and underground piping. Since the pump house is in better condition than the attached storage facility, it might be possible to refurbish the main building and demolish and replace the storage facility only, which would be less costly. This would also be done in FY 07/08. Part of the initial design budget will be used for inspection of the facilities to determine infrastructure integrity and to determine an action plan. Even though the equipment is currently operational, it is over 40 years old and will require replacement soon. If it is determined that its useful life can be extended through maintenance, the budget will be adjusted accordingly. However, it is anticipated that the evaluation will recommend rebuilding/replacing of pumps and motors.

### Service Level

No service level effect.

### Issues

None.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	153,000	554,880	565,977	577,297	0	0	0	0	0	1,851,154	1,851,154
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	153,000	554,880	565,977	577,297	0	0	0	0	0	1,851,154	
<b>Total</b>	0	0	0	153,000	554,880	565,977	577,297	0	0	0	0	0	1,851,154	1,851,154
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825230 Cleaning of Water Tanks

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project involves cleaning the inside of all ten City-owned water tanks every five years and effecting minor repairs, as needed. Five small tanks at Hamilton and Central and one large tank at Wright will be re-coated during FY 05/06 and cleaned during FY 10/11. A second large tank at Wright will be recoated during FY 09/10 and cleaned during FY 14/15. Since the other tanks will be re-coated in later years, they will be placed on the cleaning schedule at that time.

Water tanks are critical to the storage and delivery of safe drinking water. Regularly scheduled cleaning is required by the Department of Health Services to maintain water quality standards. A planned and scheduled program is better than a reactive shutdown of a tank once a problem is identified.

### Service Level

The project will preserve the City's investment in its infrastructure and will help maintain water availability and quality.

### Issues

None.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	28,143	0	0	0	7,030	7,171	42,344	42,344
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	28,143	0	0	0	7,030	7,171	42,344	
<b>Total</b>	0	0	0	0	0	0	28,143	0	0	0	7,030	7,171	42,344	42,344
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825240 Equipment Replacement at Five (5) Hetch-Hetchy Connections

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2007-08	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project provides for the replacement of reducing valves, gate valves, limitorque valves and vaults and to install magnetic meters at five connections to the Hetch-Hetchy water supply pipeline. Most valves to be replaced are 8" to 16" diameter. The equipment is being replaced because of age (40 to 50 years old) and to provide upgrades allowing each facility to be connected to the City's Supervisory Control and Data Acquisition (SCADA) system.

The connections are located at Lawrence, Fair Oaks, Borregas, Lockheed, Palomar, and Mary (/Hetch-Hetchy). There are a total of 9 pressure-reducing valves, over 30 gate valves, 6 limitorque valves with control centers, 13 vaults, and 6 magnetic meters to be replaced or installed. These items will provide better control of the water system.

### Service Level

These upgrades allow for the preservation and integrity of the vital connections of the City's water supply to the Hetch-Hetchy water supply system.

### Issues

Staff will seek Proposition 50 funding for the project.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	111,000	0	291,720	287,150	0	0	0	0	0	0	0	578,870	689,870
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	291,720	287,150	0	0	0	0	0	0	0	578,870	
<b>Total</b>	0	111,000	0	291,720	287,150	0	0	0	0	0	0	0	578,870	689,870
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825250 Mary/Carson Water Plant Mechanical Reconstructions

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2008-09	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The existing pumping facilities and emergency pumping engine at the Mary/Carson water plant were built and installed in 1966 and are now old and inefficient. Equipment replacements and upgrades are necessary to maintain system integrity, conform to new Supervisory Control and Data Acquisition (SCADA) specifications, and improve the impact of emergency engine operation on local air quality.

Needing replacement are 5 regulating valves, 3 electric motors (with a booster pump and a motor control center for each motor), and a lighting electrical sub-panel. One magnetic flow meter and one limitorque valve will also be installed. These items will provide better control of the water system. The propane generator that will replace the Waukesha motor will provide electricity during power failure to the whole station and not to just one pump as the existing system does. This project is similar to the Wright Ave Water Plant Mechanical Reconstruction project.

### Service Level

The project will upgrade the Mary/Carson water plant's mechanical and electrical systems to better serve the City's needs.

### Issues

This project may qualify for an Environmental Protection Agency grant. Staff will explore this possibility.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	156,953	496,836	394,157	0	0	0	1,047,946	1,047,946
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	156,953	496,836	394,157	0	0	0	1,047,946	
<b>Total</b>	0	0	0	0	0	0	156,953	496,836	394,157	0	0	0	1,047,946	1,047,946
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825260 Moat Renovation of Mary/Carson and Wolfe/Evelyn Water Plants

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2006-07	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Board/Commission			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The Mary/Carson and Wolfe/Evelyn water plants are equipped with containment areas (moats) that surround the perimeter of the plant. The moats are designed to protect the surrounding neighborhoods from flooding in the event of a tank failure or failure of tank water supply to shut off at the appropriate level. The moats at these two plants have eroded or have slumped over time and need to be graded to re-establish suitable containment volume and structural integrity.

This project involves repairing moats (overflow containment areas) by grading and reshaping, developing effective erosion control on the slopes, and installing one sump pump at the Wolfe/Evelyn plant.

### Service Level

No service level effect.

### Issues

None.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	0	0	0	0	58,583	149,387	207,970	207,970
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	0	0	0	0	58,583	149,387	207,970	
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	58,583	149,387	207,970	207,970
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825280 Earthquake Mitigation of Water Tanks

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2007-08	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1C	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

A seismic vulnerability assessment was performed on the City's nine water tanks. As a result, it was determined that the five smaller tanks require seismic retrofitting. The affected tanks are Central #2 (built in 1954); Hamilton #2 (1957); Central #1 (1949); Hamilton #1 (1956); and Hamilton #3 (1959).

This project improve foundation connections by anchoring tanks to the ground and will also improve water inlet, outlet, and overflow connections by adding flexible couplings to make them more reliable in seismic events. The impact of tank failure during seismic activity would be amplified by likely additional needs placed on the water system to protect public health and to provide fire suppression.

Staff will apply for a Federal Emergency Management Agency (FEMA) grant that would provide 75% of the funding necessary for this project.

### Service Level

The project will preserve the City's investment in its infrastructure and prevent possible breakdown of the water tanks in the event of a large earthquake. It will also preserve water availability for fire fighting under emergency conditions.

### Issues

75% of the project cost may qualify for FEMA grants. Staff will apply for grant funding.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	150,000	0	0	104,040	451,013	460,034	469,234	478,619	0	0	0	1,962,940	2,112,940
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	104,040	451,013	460,034	469,234	478,619	0	0	0	1,962,940	
<b>Total</b>	0	150,000	0	0	104,040	451,013	460,034	469,234	478,619	0	0	0	1,962,940	2,112,940
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825300 Pressure Reducing Valve Replacement & Relocation for SCADA

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project will replace 60 existing pressure-reducing valves (PRVs) with new ones on a City-wide basis. Work will be prioritized and done by City staff at a rate of 1 valve/yr, starting in FY 05/06, ramping up to 2 valves/yr by FY 10/11, and connecting them to the Supervisory Control and Data Acquisition (SCADA) system. This will allow City staff to remotely monitor and control water system pressures, turn valves on and off quickly in emergencies, and better manage and maintain water quality, in general.

PRVs are an integral part of the water distribution system and provide balanced water pressure throughout the City. The PRVs are 40 to 50 years old, and preventive maintenance is exceeding replacement costs. Properly functioning PRVs will help reduce the number of main breaks caused by high pressure and will also provide additional fire protection.

### Service Level

No service level effect.

### Issues

Staff has applied for Prop 50 funding.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	60,000	0	61,200	62,424	63,672	121,232	123,657	126,130	128,653	131,226	133,850	952,044	1,012,044
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	61,200	62,424	63,672	121,232	123,657	126,130	128,653	131,226	133,850	952,044	
<b>Total</b>	0	60,000	0	61,200	62,424	63,672	121,232	123,657	126,130	128,653	131,226	133,850	952,044	1,012,044
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825310 Shrouds at Well Sites

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	Parks and Recreation
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

Following the events of September 11, 2001, the United States Environmental Protection Agency (USEPA) received a supplemental appropriation from Congress to improve the safety and security of the nation's water supply. A grant program was established to assist local water utilities in responding to the threat of terrorist attacks and to improve the security of water utility infrastructure and operations. Priority activities included: 1. Developing a Water System Vulnerability Assessment (VA), which was given the highest priority under the grant program, since it is the first step in understanding how and where a water utility can be damaged by a terrorist attack; 2. Developing an Emergency Operations Plan to deal with the threats identified in the Vulnerability Assessment; and 3. Planning and designing projects to enhance the water utility's system security. With grant monies, the City of Sunnyvale contracted with a security and vulnerability assessment team to provide a vulnerability assessment. The assessment recommended the installation of cages around some vulnerable water system components as one of the least costly, most effective ways to protect them.

This project provides for the installation of a security cage (shroud) around all air relief valves at nine well sites. Staff has determined that, by doing the installation in-house, the budget for the project will not exceed \$50,000. Once the shrouds have been installed around the air relief valves, installation of shrouds around tank ladders at two well sites can wait for further evaluation.

### Service Level

No service level effect.

### Issues

Prop 50 grant funding applied for with SCADA system improvements.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	50,000	0	0	0	0	0	0	0	0	0	0	0	50,000
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
<b>Total</b>	0	50,000	0	0	0	0	0	0	0	0	0	0	0	50,000
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Project Information Sheet

### Project: 825390 Wolfe/Evelyn Plant Mechanical Reconstruction

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2007-08	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project involves replacing booster pumps and regulating valves, motors, motor control center, and booster room underground piping at the Wolfe/Evelyn water plant. It will also replace an existing Waukesha motor and pump with a propane generator and transfer switch and install a magnetic flow meter.

The Wolfe/Evelyn plant was built in 1959, and all the current equipment is original. Part replacement is currently very costly due to obsolescence of pump. The electrical panels are sub-standard and in need of replacing.

### Service Level

The project will upgrade the plant's mechanical systems to better serve the City's needs.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	150,858	451,013	230,017	234,617	0	0	0	0	1,066,505	1,066,505
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	150,858	451,013	230,017	234,617	0	0	0	0	1,066,505	
<b>Total</b>	0	0	0	0	150,858	451,013	230,017	234,617	0	0	0	0	1,066,505	1,066,505
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825410 Hamilton Plant Emergency Generator & Mechanical Reconst

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project has two parts: the first part is installing the already-purchased generator, including concrete pad base, with electrical connection and testing of the system. This needs to be done as soon as possible to avoid potential damage or deterioration of the generator. The second part is the mechanical reconstruction of 2 submersible well pumps and their motors, 4 motor control centers, 2 booster pumps and their motors, and the replacement of some piping. A new magnetic flow meter and a transfer switch for the emergency generator will also be provided.

The first part will cost approximately \$80,000 and will include the structural engineering of the pad and underlying ground grid conduits from the pad to the building; permits from Bay Area Air Quality Management District and our Building Dept.; concrete construction; and system testing . The second part will cost approximately \$690,000, and will include engineering design and construction.

### Service Level

The project will preserve the City's investment in this piece of infrastructure and ensure that it will be adequate for present and future needs.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	190,000	0	591,600	0	0	0	0	0	0	0	0	591,600	781,600
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	591,600	0	0	0	0	0	0	0	0	591,600	
<b>Total</b>	0	190,000	0	591,600	0	0	0	0	0	0	0	0	591,600	781,600
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825420 Water Pressure Zone Three Expansion

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The City's water system is separated into three pressure zones. Currently, pressures in the Hollenbeck/Homestead area, which are contained within pressure zone 3, are lower than desired.

This project will install one pressure relief valve (SCADA-ready) at one of Zone 3 valve locations, improving pressures in the target area and, as a consequence, also improving fire services. Additionally, the project will upgrade the system in order to enable it to be connected through the new SCADA system.

### Service Level

No service level effect.

### Issues

No issues.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	106,000	0	0	0	0	0	0	0	0	0	0	0	106,000
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
<b>Total</b>	0	106,000	0	0	0	0	0	0	0	0	0	0	0	106,000
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825430 Raynor Well Connection

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2006-07	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	Parks and Recreation
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project will connect the Raynor well to the Wolfe transmission main, thus allowing staff to provide water to the Wolfe/Homestead area if the water supply from Hetch-Hetchy or Santa Clara Valley Water District (or both) is interrupted. It will involve installation of 1820' of 10"-diameter ductile iron pipe, a new pressure-reducing valve, and isolation valves. The connection will improve stability of the water system. Staff has applied for Prop 50 funding which provides 50% matching of funds.

### Service Level

No service level effect.

### Issues

Applied for Prop 50 Grant.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	0	0	0	80,408	421,797	0	502,205	502,205
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	0	0	0	80,408	421,797	0	502,205	
<b>Total</b>	0	0	0	0	0	0	0	0	0	80,408	421,797	0	502,205	502,205
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825440 Recycled Water Booster Pump @ Golf Course

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project will install a booster pump and electrical service at Sunnyvale Golf Course.

Until the recycled water distribution system is looped, there will always be fluctuation in the system pressure. The golf course is one of the largest users of recycled water. Providing a booster pump will allow for more consistent water pressure and will result in improved conditions and appearance of the turf.

### Service Level

The booster pump will provide more pressure for irrigation purposes.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	175,000	0	0	0	0	0	0	0	0	0	0	0	175,000
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
<b>Total</b>	0	175,000	0	0	0	0	0	0	0	0	0	0	0	175,000
<b>Operating Costs</b>	0	0	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	10,000	10,000

# Project Information Sheet

## Project: 825450 City-Wide Water Line Replacement

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2021-22	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

The integrity of the City's water supply system is critical to protect public health, enhance sanitation, and provide fire suppression. The success of these goals is dependent on the maintenance and eventual replacement of aged and worn infrastructure.

Currently, many portions of the water system have exceeded the estimated life expectancy provided by the Federal Environmental Protection Agency for mains and distribution lines of 35 to 40 years. Much of Sunnyvale's system is ductile iron pipe, which was once considered a very acceptable water system standard. However, the pipe deteriorates over time because of chemical reaction with certain soils.

Failure of these lines can be caused by a sudden break in the line resulting from structural failure of the eroded pipe material. Such a break can result in the failure of the pipe to deliver water, subsequently endangering a neighborhood or degrading the pressure and supply of the entire system, depending on the pipe size and location.

This project replace 20 miles out of a total of 280 miles of cast-iron water lines with C900 Class 200 lines, at a rate of 0.3 m/yr ramping up to 2 m/yr by 2011. Replacement will also upgrade pipes and fittings for seismic stability.

This project will also minimize the need for costly emergency response activities from the Field Services division that are caused by pipe breaks. Ongoing scheduled water line replacement is not only more cost-efficient than corrective or emergency repairs, but also less disruptive to residents. Water main infrastructure is 50+ years old and beyond its estimated life expectancy.

### Service Level

The project will preserve City's investment in its infrastructure and increase water system life span.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	250,000	0	468,480	583,664	595,337	607,244	619,389	631,777	644,412	657,300	677,020	5,484,623	5,734,623
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	468,480	583,664	595,337	607,244	619,389	631,777	644,412	657,300	677,020	5,484,623	
<b>Total</b>	0	250,000	0	468,480	583,664	595,337	607,244	619,389	631,777	644,412	657,300	677,020	5,484,623	5,734,623
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825460 Interior Coating of Water Tanks

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2013-14	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project will remove the interior coal tar coating of five small water tanks and three large water tanks and will re-coat them to American Water Works Association standards. Coal tar coatings are no longer allowed by the Department of Health Services.

The small water tanks' existing coat is cracking and allowing growth of bacteria, and they are scheduled for re-coating during FY 05/06 (2 tanks at Central and 3 tanks at Hamilton). The other, large tanks are in better condition and do not represent an imminent health problem and are scheduled for recoating at a later time (1 tank at Mary/Carson in FY 11/12 and the other one in FY 12/13; 1 tank at Wolfe/Evelyn in FY 13/14).

Refurbishing the tanks is much more cost-efficient than replacing them, since the cost of replacing one tank is in the millions of dollars. Also, replacing one or more of the tanks would burden the water distribution system for a longer period of time, since the storage of water would not be available for drinking or fire protection. Proper coating should keep the tanks in good condition for up to 40 years.

### Service Level

No service level impact.

### Issues

None.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	296,514	302,444	0	0	371,634	379,066	386,648	394,381	2,130,687	2,130,687
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	296,514	302,444	0	0	371,634	379,066	386,648	394,381	2,130,687	
<b>Total</b>	0	0	0	0	296,514	302,444	0	0	371,634	379,066	386,648	394,381	2,130,687	2,130,687
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825470 Well Study

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

Two of the City's existing wells are currently used for standby purposes only since their production levels have tapered off significantly. Additionally, due to their low level, there are increased issues with water quality.

This project will provide for a study of the feasibility of drilling two new wells to replace the old wells and improve the City's water supply.

### Service Level

No service level effect.

### Issues

This project may qualify for Prop 50 funding.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	0	0	0	0	0	0	0	0	0	46,866	0	46,866	46,866
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	0	0	0	0	46,866	0	46,866	
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	46,866	0	46,866	46,866
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0



## Project Information Sheet

### Project: 825480 Inspection and Renovation of Well Systems

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	Ongoing	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project replace the electrical panels in the motor control centers of Westmoor and Serra wells. Renovation work on additional wells will be done on an as-needed basis. The design of the project will be done during FY 05/06, and construction will take place in FY 06/07.

### Service Level

The project will ensure that wells are maintained and that pumps are reliable, especially at times when they are most needed or in emergencies when Hetch-Hetchy or Santa Clara Valley Water District supplies may be interrupted.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	40,000	0	163,200	0	0	0	0	0	0	0	0	163,200	203,200
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	163,200	0	0	0	0	0	0	0	0	163,200	
<b>Total</b>	0	40,000	0	163,200	0	0	0	0	0	0	0	0	163,200	203,200
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825490 Exterior Painting of Water Tanks

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2006-07	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	Community Development
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

This project will repaint the exterior of two 5M gallon water tanks at Wolfe/Evelyn and Mary/Carson water plants (one each) during FY 06/07 and five 500K gallon water tanks at Hamilton and Central plants (3 and 2 respectively) during FY 10/11. The new paint will comply with American Water Works Association specifications, so as to meet current standards and protect this infrastructure investment and its life expectancy. Repainting is generally done in a 10-year cycle.

### Service Level

No effect.

### Issues

none

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	25,000	0	0	260,100	21,224	0	0	0	0	234,332	0	515,656	540,656
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	260,100	21,224	0	0	0	0	234,332	0	515,656	
<b>Total</b>	0	25,000	0	0	260,100	21,224	0	0	0	0	234,332	0	515,656	540,656
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Project Information Sheet

### Project: 825500 Wright Ave Water Plant Mechanical Reconstruction

Category:	Infrastructure	Type:	Water	Department:	Public Works
Origination Year:	2005-06	Phase:	Planning	Project Manager:	Hira Raina
Planned Completion Year:	2005-06	% Complete:	n/a	Project Coordinator:	Jim Craig
Origin:	Staff			Interdependencies:	none
Element:	3 Environmental Management	Goal:	3.1A.3, 3.1E.3	Fund:	455 Utilities
Sub-Element:	3.1 Water Resources	Neighborhood:	City Wide	Sub-Fund:	100 Water Supply and Distribution

### Project Description and Statement of Need

Needing replacement at the Wright Avenue Water Plant are 5 regulating valves, 3 electric motors (with a booster pump and a motor control center for each motor), and a lighting electrical sub-panel. One magnetic flow meter and one limitorque valve will also be installed. These items will provide better control of the water system. The propane generator that will replace the Waukesha motor will provide electricity during power failure to the whole station not to just one pump as the existing system does. This project is similar to the Mary/Carson Water Plant Mechanical Reconstructions project.

The most urgent item of the project is the installation of limitorque and magnetic meter to allow Supervisory Control and Data Acquisition (SCADA) control. The rest of the project will be done at a later date.

### Service Level

The project will provide needed improvement to the City's water supply system.

### Issues

This project may qualify for Prop 50 funding. Staff will explore this possibility.

### Project Financial Summary

Financial Data	Prior Actual	Budget 2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	10 Year Budget	Grand Total
<b>Project Costs</b>	0	50,000	0	0	0	0	108,243	331,224	546,189	0	0	0	985,656	1,035,656
<b>Revenues</b>														
<b>Total</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Transfers-In</b>														
Fund Reserves		0	0	0	0	0	108,243	331,224	546,189	0	0	0	985,656	
<b>Total</b>	0	50,000	0	0	0	0	108,243	331,224	546,189	0	0	0	985,656	1,035,656
<b>Operating Costs</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0